

APPENDIX G

TIRE LIFE AND TIRE WEAR FACTORS

SECTION I. TIRE WEAR FACTORS

The tire wear factors used in this pamphlet are listed in APPENDIX D. The "useful life" of a new tire is the product of Condition Factors (CF) from Group A through Group E multiplied by the Wheel Position Factor (WPF), and for drive tires only, the Grade Factor (GF). These factors provide a percentage reduction to the maximum tire life. Section II, Maximum Tire Life, states tire life in hours. See Chapter 2 for tire methodology.

Drive Tires: Useful Tire Life = (CF x WPF x GF)

All Other Tires: Useful Tire Life = (CF x WPF)

EXAMPLE *

* Condition Factors, Wheel Position Factors, and Grade Factor are from GMC Terex Guide.

Factors are specifically for a rear dump wagon.

Condition Factors (CF):

		<u>Average</u>	<u>Severe</u>
A	Maintenance	1.00	1.00
B	Speeds	0.80	0.85
C	Curves	1.00	0.90
D	Surface Condition	0.90	0.70
E	Loads	<u>0.90</u>	<u>0.80</u>

CF	<i>Product of the factors (A x B x C x D x E)</i>	0.65	0.43
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Wheel Position Factors (WPF):

WPF-FT	Front Tire (FT)	0.90	0.90
WPF-DTR	Drive Tire (DT) - Rear Dump	0.70	0.70
WPF-TT	Trailing Tire (TT)	1.00	1.00

Grade Factor (GF):

GF	Grade Factor (Drive Tires Only)	0.85	0.75
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TIRE LIFE AND TIRE WEAR FACTORS

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SECTION I. TIRE WEAR FACTORS (continued)

EXAMPLE: FINAL TIRE WEAR FACTORS FOR WAGON, REAR DUMP (See APPENDIX D, Category W15)

	<u>Average</u>	<u>Severe</u>
Front Tire - Average = (CF = .65)(WPF-FT = .90)	0.59	
Front Tire - Severe = (CF = .43)(WPF-FT = .90)		0.39
Drive Tire - Average = (CF = .65)(WPF-DTR = .70)(GF = .85)	0.39	
Drive Tire - Severe = (CF = .43)(WPF-DTR = .70)(GF = .75)		0.22
Trailing Tire - Average = (CF = .65) (WPF-TT = 1.00)	0.65	
Trailing Tire - Severe = (CF = .43) (WPF-TT = 1.00)		0.43

SECTION II. MAXIMUM TIRE LIFE

Maximum tire life is used in the formula to determine tire wear cost.

<u>MAXIMUM TIRE LIFE</u>	<u>Hours</u>
Bias Ply Tires - Off highway E4, L4, and L5	5,000
Bias Ply Tires - All other bias tires	5,000
Radial Ply Tires - Off highway RL4	5,000
Radial Ply Tires - All other radial tires	5,000
Conveyor Belts	5,000